STRICTURE OF THE URETHRA.

A Report of One Hundred Cases Treated by Internal Urethrotomy.

BY

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LOS ANGELES, CAL.

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A review of the one hundred cases herein reported, I trust, will be of sufficient value to add evidence to the merit of the operation of internal urethrotomy.

I wish to first state that I do not treat all strictures by internal urethrotomy. Dilatation has its value, but where we fail to effect a cure by dilatation, after giving it a fair trial, we should feel it our duty to try to cure our patient, and not send him away with a box of sounds, and tell him he must pass them occasionally the remainder of his life. And also in many of the so-called impermeable strictures (where, by repeated efforts, a filiform bougie can be made to pass the obstruction) internal urethrotomy is the operation far preferable to the external operation. Experience has also taught me that in the nodular and semi-fibrous strictures, whether of small or the so-called large caliber, it would be folly and torturous treatment to the patient to attempt to cure him by dilatation.

The operations herein reported cover a space of ten years, and while I have not been able to keep track of all the cases, I have endeavored to keep track and notes of the more serious ones.

The following is a copy of a circular letter addressed to those more serious cases:

MR. ——

Dear Sir:—Would you please inform me whether or not you have experienced any trouble from your stricture since I operated on you and pronounced you cured? Yours truly,

W. H. DUKEMAN.

The following reply to case No. 1 of this report is a fair sample of many replies received, and proves the permanency of the cure. (Case No. 1 was operated on ten years ago.)

N. Y., June 27th, 1896.

DR. WM. H. DUKEMAN, Los Angeles, Cal.

My Dear Doctor:— * * * * I am happy to state that my strictures have never given me the least bit of trouble since you cured me. The sound you gave me I had not passed for over three years. It slipped in as easy as ever, and I have concluded I need not bother passing it any more. * * * *

Yours very respectfully, F. L. G.

The larger majority of the operations have been done in this city, and whenever opportunity offers I make inquiry of my patients how they are getting along. In some few the operation had to be repeated, as the report shows. And I myself have operated a second time, failing to make a thorough division of the stricture tissues at the first operation, and in two instances, cases No. 59 and 63, a third operation was performed before a cure was effected, showing conclusively that the stricture must be thoroughly and completely divided before a permanent cure can be assured, no matter whether the stricture is of small caliber, or of the so called large caliber. I have not followed any special hobby in determining on an operation, nor have I followed any *hobby* in determining the normal caliber of the urethra by corresponding measurements. Each case is studied of itself before an operation is decided upon. The caliber of the healthy urethra is determined by the use of the *bougie à boule* or the urethrameter. Into the urethra is first injected a drachm of olive oil. The placid penis is slightly pulled up, not stretched, and the urethrameter is introduced, and as it is being expanded it is moved along the urethral canal until it is expanded up to a point which will snugly fill the urethra and yet not fit tight, but will move smoothly and freely.

The normal caliber having been determined, the exact location and caliber of the stricture or strictures is determined with the same instrument, although the *bougie à boule* will answer very nicely. By not stretching the penis we can more accurately determine the normal caliber as well as the location and caliber of the stricture.

In many cases I found the meatus very small in comparison to the normal caliber of the urethra, and in all of these cases it was absolutely necessary to enlarge the meatus to the size of the normal urethra. But in doing so I find that in the majority of cases the meatus can be sufficiently enlarged without ripping the external very elastic membrane at the junction of the lips, the lower commissure, as is the usual custom. By preserving this external elastic covering the urethra retains its normal propulsive power, and the stream of urine does not spread and spatter in all directions. With Otis' urethiatome the meatus can be enlarged to the desired caliber very nicely; care being taken not to withdraw the knife through the commissure of the external membrane.

Before an operation is performed, the patient is prepared by giving him a mild saline cathartic the day previous. And immediately before the operation the urethra is thoroughly cleansed by irrigation. A reflux catheter is introduced well up to the prostatic urethra and one or two quarts of a warm, three per cent solution of boracic acid is passed through. In some cases where bladder complications exist, this organ is also thoroughly washed. The penis and surrounding parts are also thoroughly washed. Everything being clean and aseptic I then inject two cubic centimeters of a four per cent solution of cocaine into the urethra if the stricture is in the four-inch distal end and a two per cent solution if the stricture is in the deep urethra and have it retained from seven to ten minutes. (See article, "Cocaine in Urethral Surgery," by the writer in the *New York Medical Journal* for Sept. 21st, 1895.) All instruments used are also rendered aseptic.

After the operation the urethra is again well irrigated with the boracic acid solution plus ten per cent listerine and the patient is put to bed. A piece of absorbent cotton or lintine about nine inches square with a hole in the center through which to pass the penis is placed over the parts. The penis is laid up over the pubes, and over the penis is laid a thin piece of

lintine moistened with the listerine solution and a small piece of ice is now laid on the penis. Every fifteen or twenty minutes the ice is taken off to keep from chilblaining the penis, and then in a couple of minutes replaced again. This is kept up for from twelve to twenty-four hours. Once an hour for the first two days the urethra is irrigated with the listerine solution. During the first twenty-four hours the patient is kept on a milk diet and if no signs or symptoms of urethral fever appear up to this time he is allowed to get up.

The patient is invariably up and around the next day after the operation. In only three cases out of the hundred—Nos. 9, 20 and 76—were patients confined to their bed for three days. In all three there was retention of urine before the operation. All the others were up and around in twenty-four to forty-eight hours. No urethral fever nor complications having occurred in any case, it is needless to state there were no deaths.

I did not pass a sound until the fourth to the seventh day after the operation, and in one instance, case No. 26, owing to the patient going out of town, a sound, No. 30, was not passed until the tenth day. The sound passed as easily then as it did immediately after the operation. From this time on I have not passed a sound until several days after the operation, and I am now lengthening out the time and pass a sound only a few times until the incision is thoroughly healed and then only occasionally for a short time after. In the above instance the No. 30 sound was passed only twice, and after six months the same sized sound passed as freely as on the day of the operation. I am now investigating how often it is really necessary to pass a sound after a complete division of the stricture, and whether it is at all necessary in a particular class of cases. I hope to be able to report favorably on this point in the near future.

After an operation a cure is determined only when the same sized *bougie à boule* passes through the once strictured urethra as freely as it does through the normal healthy urethra, recognizing, of course, the irregularities of the caliber of the normal urethra, and the roughened vibrations in case of stricture, communicated by the sense of touch to the fingers along the instrument, which experience alone teaches and to which the fingers become educated. Also all former symptoms having disappeared.

Why some surgeons of large experience in treating strictures continue to protest against internal urethrotomy and speak so praiseworthy of dilatation I cannot understand. To bear out the position I have taken I will report more in detail case No. 98, viz.: Sixteen years ago he was treated by his family physician by dilatation. After one year's treatment he was advised to go to Philadelphia to consult a well-known specialist who, after a thorough examination, advised him to get a set of sounds (Nos. 20 to 26 F.), and to pass the largest he could pass occasionally as best he could the remainder of his life, strongly advising him not to have an operation performed, stating that if he could always pass a No. 24 or 26 F. sound he should consider himself well and fortunate as to his ailment. Here, then, is a young man condemned to be an invalid the rest of his life, who, by the advice of an able and well-known specialist has for fifteen years suffered much pain and distress and torture in the passing of sounds and much annoyance and untold disgust from a chronic discharge all this time. Finally, when his health is greatly undermined, he seeks the climate of California to regain his health, never thinking his stricture could be cured. It was only by accident that he called at my office. He related his history. After a thorough examination I advised an immediate operation which, I am happy to say, resulted in a cure in ten weeks. He returned to his home in Pennsylvania and re-entered into business a well man, so far as his stricture is concerned.

No.	Case	Age	Married or Single	Attacks of Gonorrhœa No.	First.	Last.	Symptoms presented on examination.	Normal caliber of urethra No. F	Location and caliber of strictures Inch	No. F	Stricture cut to No. F	Results.	Former Treatment.
	1886												
1	F. L. G.	36	M.	4	14 yrs. ago	1 yr. ago	Chronic discharge, shooting pains in urethra, irritable bladder. Strictures irritable and bleed.	30	½ 3¾ 5½	12 10 6	32	Cured in 2 mos.	Passed sounds up to 20F for p'st 5 yrs. until stricture became irritable.
2	C. B.	24	S.	2	4 yrs.	1 yr.	Chronic discharge, pains in urethra, tenesmus when urinating, pain in back. (After divulsion had lumbar abscess.)	32 Secon	3 3¾ d op	4 2 ertn	32 34	Greatly impr'd after 10 weeks. Second operat'n cured in 6 mos	Was treated by electricity and forcible dilatation by Gouley Divulsor 2 years ago.
3	E. C.	22	S.	1	1 yr.	.....	Uneasy feeling and pains in urethra and testicles.	31	½ 2	22 20	32	Cured in 4 wks.	Dilatation for 2 months little improvement.
4	F.W. R.	28	S.	3	5 yrs.	2 yrs.	Scalding sensation and pain in urethra, strictures irritable.	30	¾ 2½ 4	22 20 19	31	Cured in 6 wks.	Was treated by electrolysis and dilatation.
5	M. D.	28	S.	1	2 yrs.	.....	Pain in testicles and pain and irritation while urinating.	30	3¾	22	32	Cured in 7 wks.	Dilatation.
6	F. R. A.	33	M.	1	15 yrs.	.....	Double meatus, shooting pains in urethra and back.	30	½ 2½	17 6	31	Cured in 2 mos.	None.
7	J. O. D.	27	S.	1	2 yrs.	.....	Pain and irritation while urinating.	31	2 3	24 26	32	Cured in 4 wks.	Dilatation.
8	C. G. F.	26	M.	3	4 yrs.	1 yr.	Chronic discharge, pains in urethra, stricture irritable and bleeds.	31	¾ 2½	20 16	32	Cured in 4 wks.	Dilatation.

	1886												
9	S. R.	42	S.	3	20 yrs.	3 yrs.	Chronic discharge, pain while urinating, tenesmus and pain in back, shooting pains in urethra. Second operation.	30	1 to 4 and $5\frac{1}{2}$ to $6\frac{1}{2}$	2 1	30 32	In 3 mos. was not well. Cured in 6 wks.	Dilatation for 8 years to 12 F. For past 2 years did nothing.
10	H. H.	33	M.	2	10 yrs.	3 yrs.	Pain in urinating and pain in back	28	$2\frac{1}{2}$	22	29	Cured in 4 wks.	Dilatation.
	1887												
11	L. C.	34	M.	4	12 yrs.	2 yrs.	Shooting pains in urethra, stricture very irritable	30	1 $3\frac{3}{4}$	27 22	32	Cured in 6 wks.	None.
12	C. E. F.	28	M.	2	10 yrs.	3 yrs.	Scalding sensation and pain in urethra.	30	$\frac{3}{4}$ $2\frac{1}{2}$	22 24	31	Cured in 4 wks.	Dilatation.
13	E. R.	27	S.	2	4 yrs.	3 yrs.	Shooting pains in urethra and cystitis.	29	3 to $3\frac{1}{2}$	22	30	Cured in 2 mos.	Dilatation.
14	E. E. S.	34	S.	1	6 yrs.	.....	Burning or scalding sensations while urinating.	30	4 to $4\frac{1}{2}$	20	31	Cured in 2 mos.	None.
15	J. S.	28	S.	2	6 yrs.	1 yr.	Burning pain in perineum, shooting pains in urethra.	27	5	17	28	Cured in 6 wks.	None.
16	J. F.	35	M.	4	14 yrs.	3 yrs.	Pains in urethra and pain after urinating.	28	$3\frac{1}{2}$	13	29	Cured in 7 wks.	Dilatation.
17	T. C. D.	34	M.	2	14 yrs.	2 yrs.	Severe burning pain in urethra and testicles.	30	3 5	20 22	31	Cured in 3 mos.	Dilatation for 6 years.
18	J. H. C.	32	S.	1	3 yrs.	.....	Frequent desire to urinate and pains in urethra.	28	$2\frac{1}{2}$	20	29	Cured in 4 wks	None.
19	T. H.	24	S.	1	2 yrs.	.....	Bloody discharge, stricture irritable.	30	$3\frac{1}{2}$	18	31	Cured in 6 wks.	Dilatation.

No.	Case	Age	Married or Single	Attacks of Gonorrhœa			Symptoms presented on examination.	Normal caliber of urethra	Location and caliber of strictures		Stricture cut to		Results.	Former Treatment.
				No.	First.	Last.		No. F	Inch	No. F	No. F			
	1888													
20	T. C.	28	S.	1	3 yrs.	....	Chronic discharge, retention of urine, high fever, confined to bed for 2 weeks.	30	3 5	14 9	31		Up and around in 3 days. Cured in 6 wks.	Dilatation for 6 months causing great irritation and retention of urine.
21	H. K.	33	M.	2	5 yrs.	6 mos	Chronic discharge, rheumatism pains in urethra and testicles.	31	¾ to 3½	24 18	33		Cured in 2 mos.	Dilatation for 2 years.
22	P. W.	30	M.	N	.....	.....	Traumatic stricture, pains in urethra and testicles.	26	2½ to 4	13	27		Cured in 3 wks.	None.
23	M. M.	29	S.	2	4 yrs.	2 yrs.	Morning drop and pain in back.	29	2½	17	30		Cured in 4 wks.	Dilatation.
24	D. B.	27	S.	3	7 yrs.	3 yrs.	Pains in urethra, shooting pains in scrotum.	29	5	22	30		Cured in 3 wks.	None.
	1889													
25	T. J.	32	M.	N	.....	.....	Traumatic stricture, pains in urethra, testicles and back. Passes 28 sound weekly. Stricture irritable.	34	1½ to 3	26	36		Cured in 3 mos.	Was operated on twice by well known N. Y. specialist. Passed 32 sound until 1 yr. ago.
26	J. D.	24	S.	1	3 yrs	.....	Scalding pain while urinating, piercing pains along urethra.	29	2½	12	30		Cured in 4 wks.	None.
27	T. B.	27	S.	1	2 yrs	.....	Frequent urination and pain in urethra.	32	3½	20	33		Cured in 4 wks.	Dilatation.
28	M. W.	29	M.	1	4 yrs.	.....	Pains in urethra and pains in groins.	30	2½	24	31		Cured in 4 wks.	Strong injection.

	1889												
29	W.R. H.	26	S.	1	4 yrs.	.....	Pains in urethra and pain in urinating.	28	1 4	24 18	29	Cured in 6 wks.	Dilatation.
30	L. E.	27	M.	2	6 yrs.	2 yrs.	Burning sensation in urethra, pain in back.	30	3½	18	31	Cured in 7 wks.	Dilatation.
	1890												
31	C. R.	26	S.	1	2 yrs.	.....	Burning pains while urinating.	30	2½	22	30	Cured in 4 wks.	None.
32	A. C. V.	32	S.	2	6 yrs	2 yrs.	Chronic discharge and pains in urethra, very nervous. Passes 18 sound.	28	3½	20	29	Cured in 2 mos. nervousness also relieved.	Dilatation for 1½ years.
33	F. G. J.	27	S.	1	3 yrs.	.....	Pain while urinating, pain in urethra.	31	3½	18	32	Cured in 5 wks.	Dilatation.
34	P. L.	55	M.	1	15 yrs.	....	Pain in urinating and chronic cystitis. Passes No. 9 bougie.	29	4½	12	31	Cured in 7 wks.	Dilatation for 10 years.
35	B. H.	30	S.	1	6 yrs.	.....	Difficulty in urinating. Passes No. 15 bougie.	30	4	16	31	Cured in 6 wks.	Dilatation for 2 years.
36	A. W.	45	M.	1	20 yrs.	... .	Tenesmus. Wears urinal for past 3 years.	28	4½	2	30	Cured in 3 mos.	Dilatation for 6 yrs. up to 3 yrs. ago when he was unable to pass sound.
	1891												
37	C. W.	41	M.	1	10 yrs.	.....	Irritation at times when urinating.	28	2½	18	29	Cured in 6 wks	Operation 1 year previous to 26.
38	W. H.	23	S.	2	4 yrs.	2 yrs.	Pain in back and pain in urethra.	30	1 3½	18 22	31	Cured in 2 mos	Dilatation, used bougie No. 18 only.
39	J. F. K.	32	S.	2	8 yrs.	3 yrs.	Pain in urethra and groins.	32	4	22	33	Cured in 6 wks	Dilatation.
40	W. E.	27	S.	2	4 yrs.	2 yrs.	Pain while urinating and pain in urethra.	30	3	20	31	Cured in 7 wks	Dilatation.

No.	Case	Age	Married or Single	Attacks of Gonorrhœa No	First.	Last.	Symptoms presented on examination.	Normal caliber of urethra No. F	Inch.	Location and caliber of strictures No.F	Stricture cut to No.F	Results.	Former Treatment.
	1891												
41	J. B.	31	S.	Several	8 yrs.	.....	Chronic discharge for past 8 years and at times sudden stoppage of urine while urinating.	30	4½	16	31	Cured in 3 mos	Was treated by dilatation on and off for several years only to retract again.
42	H. C.	30	M.	1	3 yrs.	.....	Jerky urination, pain in urinating, shooting pains in urethra, testicles and back.	32	3½	18	33	Cured in 2 mos	Operation 2 years ago, cut to 30.
43	M. E. F.	28	S.	3	6 yrs.	6 mos	Chronic discharge and shooting pain in testicles.	30	3½	20	31	Cured in 2 mos	Dilatation.
	1892												
44	J. T.	26	S.	1	3 yrs.	.....	Burning pain while urinating.	28	3½	18	29	Cured in 6 wks	Dilatation.
45	W. P.	28	S.	4	6 yrs.	6 mos	Chronic discharge since first attack and pain in urethra.	32	4	20	33	Cured in 7 wks	Dilatation.
46	P. C.	30	M.	4	8 yrs.	1 yr.	Pain in urethra and shooting pains in back.	30	3½	23	31	Cured in 2 mos	Strong injection almost continuously for past year.
47	J. P.	30	M.	1	4 yrs.	.....	Pain while urinating and pain in urethra. Chronic discharge.	31	2	22	32	Cured in 6 wks.	Dilatation.
48	T. N.	26	S.	2	3 yrs.	2 yrs.	Chronic discharge and uneasiness and coldness of testicles	32	2½	16	33	Cured in 2 mos.	Dilatation.
49	A.W. F.	24	S.	1	2 yrs.	.....	Burning sensation while urinating	28	2¾	20	29	Cured in 6 wks.	None.
50	J. H. D.	35	M.	3	9 yrs.	3 yrs.	Pain in the urethra.	30	3½	22	31	Cured in 5 wks.	Dilatation.

	1892												
51	C. S.	27	S.	3	8 yrs.	2 rs.	Pain while urinating and pain in testicles and back.	31	3 5½	18 16	32	Cur'd in 11 wks.	Dilatation.
52	G. W.	26	S.	2	5 yrs.	2 yrs.	Scalding sensation while urinating and pain in groins.	30	3½	16	31	Cured in 4 wks.	None.
53	T. W.	24	S.	1	4 yrs.	.....	Burning pain while urinating.	30	1½	22	31	Cured in 3 wks.	None.
	1893												
54	E. A.	41	M.	1	20 yrs.	.....	Pain in urethra, back and testicles. Passes No. 24 sound.	32	3½ 5½	26 24	33	Cured in 6 wks.	Dilatation.
55	O. M.	37	M.	1	17 yrs.	.....	Pain in urethra and back.	30	3 3¾	22 20	32	Cured in 2 mos.	Operated to 30 F 3 yrs. ago.
56	E. T.	34	M.	2	12 yrs.	5 yrs.	Chronic discharge and pain in urethra.	35	3 to 3⅜	32	37	Cured in 6 wks.	Operated to 32 2 years ago.
57	F. H. S.	65	M.	1	40 yrs.	.....	Vesical tenesmus and stranguary, constant dripping of urine, wears urinal for past 3 years.	28	3¾ 6	2 2	30	Cured in 4 mos.	Occasionally passed No. 12 F bougie until about 3 years ago when the passage closed.
58	N. W.	27	S.	3	6 yrs.	2 yrs.	Burning pain while urinating.	31	2	15	32	Cured in 6 wks.	None.
59	A. E.	37	M.	3	10 yrs.	3 yrs.	Milky discharge, irritation and burning sensation along urethra. Posterior chronic urethritis.	39	2½ 3½ 5¾	35 32 32	39	Improvement. 6 months later return of all	2 yrs. previous was dilated to 40 F with no improvement, passed 40 F sound himself for
							Second operation.				40	symptoms. After 3 mos. did not get well.	1 yr. with little improvement in symptoms. All efforts used to cure deep urethritis failed.
							Third operation.				42½	Cured in 6 w'ks except there remains chronic prostatorrhœa due to too early sexual indulgence.	

No.	Case.	Age.	Married or Single.	Attacks of Gonorrhœa. No.	First.	Last	Symptoms presented on Examination.	Normal caliber of urethra. No. F	Location and caliber of strictures Inch	No. F.	Stricture cut to No. F	Results.	Former Treatment.
	1894												
60	J. C.	36	S.	4	12 yrs.	2 yrs.	Retention urine; has only been able to urinate by stranguary for past 6 mos., after 2 hours careful search passed filiform.	28	3½ 6	20 0	30	Cured in 2 mos.	3 yrs. previous was operated to 26 F, since which time stricture again recontracted.
61	J. K.	32	S.	2	6 yrs.	2 yrs.	Irritation and burning sensation along urethra.	34	5½	28	35	Cured in 4 wks.	Dilatation.
62	T. H.	27	S.	3	6 yrs.	1 yr.	Pains along urethra.	30	3	22	32	Cured in 4 wks.	Dilatation.
63	J. P. P.	32	M.	3	12 yrs.	1 yr.	Discharge. Pain in urethra, loins and testicles.	31	3½	23	31	Improvement only 1 yr. later.	Dilatation.
							Contracted gonorrhœa twice since first operation. Second operation.		4½	18	32	After 6 mos did not get well.	Second operation 1 year after first.
							Third operation.				33	Strictures cur'd in 6 weeks, occasionally has prostatorrhœa due to over indulgence.	3rd. operat'n 6 mos. lat'r.
64	M. S.	26	S.	3	3 yrs.	1 yr.	Severe pains while urinating. Neurasthenia, stricture very irritable.	35	2	22	36	Cured in 6 wks.	Dilatation.
65	C. L. W.	26	S.	1	2 yrs.	.....	Irritation at times along urethra.	29	2½	23	30	Cured in 4 wks.	Dilatation.
66	J. B.	26	S.	2	2 yrs.	.....	Pain in urethra and loins.	28	2½	20	29	Cured in 6 wks.	Dilatation.
67	W. B.	27	S.	3	7 yrs.	1 yr.	Chronic discharge at times for several years.	30	2½ 4	22 24	31	Cured in 2 mos.	Dilatation.
68	J. A. C.	28	S.	3	4 yrs.	1 yr.	Pain in groins, perineum and back; uneasy feeling in urethra.	31	1 3½	27 26	32	Cured in 6 wks.	Dilatation.

	1894												
69	J. S.	25	S.	1	1 yr.	.....	Pain in urethra while urinating. Stricture irritable.	29	½ 3	22 24	30	Cured in 6 wks.	Dilatation.
70	H. B.	27	M.	3	6 yrs.	1 yr.	Pain and burning sensation while urinating.	30	1 4	22 20	31	Cured in 2 mos.	Dilatation.
71	S. A. H.	26	S.	2	3 yrs.	2 yrs.	Chronic discharge and pain and smarting while urinating. Posterior urethritis.	32	3½	28	34	Cured in 4 mos.	Operated on 1 year ago to 32, by San Francisco surgeon.
	1895												
72	S. W. G.	35	M.	1	5 yrs.	.....	Irritating watery discharge, causing excoriation of prepuce.	29	1 3	24 26	30	Cured in 3 mos.	None.
73	A. E. B.	26	M.	1	2 yrs.	.....	Bloody discharge and pains in urethra, bleeds profusely when sound is passed.	28	3	24	30	Cured in 2 mos.	Dilatation.
74	E. D.	31	M.	3	6 yrs.	2 yrs.	Pain and burning along urethra.	28	2 3 4	24 24 22	30	1 yr. after. Occasionally little irritat'n, passes 29 sound, 6 mo. later is well.	Dilatation.
75	C. I. N.	25	S.	1	1 yr.	.....	Pain in back, and at times shooting pain in urethra.	29	2½	23	30	Cured in 3 wks.	None.
76	W. T. C.	39	M.	2	15 yrs.	7 yrs	Retention urine, pains in urethra and back, cystitis. Health very poor, watery irritating discharge.	29	1½ 2½ 3¾	20 12 0	30	1 year after at times little irritation. Passes 29 sound. 2 yrs. after reported entirely cured.	Dilatation.
77	E. N.	29	S.	2	3 yrs.	1 yr.	Smarting sensation while urinating; milky discharge.	32	2½ 3¾	27	34	Cured in 4 mos.	2 yrs. ago was operated on to 32 by S. F. specialist.
78	H. J. L.	26	S.	2	6 yrs.	2 yrs.	Chronic discharge.	28	1½ to 2	22	29	Cured in 4 wks.	Dilatation.
79	G. T. I.	33	M.	2	2 yrs.	1½ yr.	Burning pain when urinating.	30	3	24	31	Cured in 2 mos.	None.

No.	Case.	Age.	Married or Single.	Attacks of Gonorrhœa. No.	First.	Last.	Symptoms presented on Examination.	Normal caliber of urethra No. F	Location and caliber of strictures Inch	No. F	Stricture cut to No. F	Results.	Former Treatment.
	1895												
80	G. W.	24	S.	1	3 yrs.	.....	Scalding pain when urinating and discharge.	28	1	22	30	Cured in 6 wks.	Strong injection.
81	M. T.	23	S.	2	3 yrs	6 yrs.	Pain in urethra when having sexual relations.	30	2 3¾	22 22	31	Cur'd in 10 wks	None.
82	R. M. N.	26	M.	1	4 yrs		Shooting pains in urethra.	29	2½	20	30	Cured in 4 wks	Dilatation.
83	W. D. B	24	S.	1	2 yrs	.....	Shooting pains in urethra.	33	3½	22	35	Cured in 3 wcs.	Dilatation.
84	E. D. C	26	S.	2	3 yrs.	2 yrs.	Profuse discharge, severe urethral pains.	29	1½ 3¾ 5	23 22 24	31	Cured in 4 mos. Has chronic prostatorrhœa; would not abstain from too early indulgnce	None.
85	R. S. L.	28	S.	2	4 yrs.	1 yr.	Pains in groins along urethra. Had urethral chancre. Secondary syphilis.	27	½ 3	22 16	28	Cured of stricture in 5 wks.	None.
86	R. G. D.	27	S.	1	2 yrs.	.....	Pains in urethra and testicles, also aching pains over pubic arch. Chronic posterior urethritis.	34	2 5½	31 30	36	Cure' in 4 wks. Posterior urethritis cured in 6 months.	Was operated on 2 yrs. ago to 32 F. Dilatation previous to and after operation.
87	J. P. F.	27	S.	1	2 yrs.	.....	Frequent urination, vesical tenesmus. Pain in penis and rectum. Posterior urethritis.	32	½ 2½ 4½	22 26 22	33	Cured in 6 wks. Pos. urethritis cured in 7 mo.	Was very badly treated by quack for 1 yr. in all conceivab'e ways.
88	O. H.	31	S.	1	2 yrs.	.....	Pain while urinating. Shooting pain in head of penis.	28	1½ 3¾	20 21	31	Cured in 3 mos.	Was badly treated by same quack.
89	S. R. N.	24	S.	1	3 yrs.	.....	Burning pain while urinating.	29	2 3	24 20	30	Cured in 4 wks.	Strong injections.

	1896												
90	E. E.	25	S.	1	2½ yrs.	.....	Scalding pains in urethra, and shooting pains in groins.	29	2½ 3¾	22 20	32	Cured in 3 mos.	Was operated on 2 yrs. ago to 29. Dilatation since.
91	C. E. P	26	S.	2	3 yrs.	2 yrs.	Pains in urethra.	29	½ 2½	23 26	31	Cured in 2 mos.	Was treated by dilatation for 1 yr. by well known Chicago specialist.
92	J. L.	23	S.	1	2 yrs.	.....	Shooting pains in penis.	30	2	23	31	Cured in 6 wks.	Dilatation.
93	W.M. E.	29	S.	2	5 yrs.	3 yrs.	Shooting pains in penis and occasional discharge.	29	3¾	22	31	Cured in 7 wks.	Operation 2 years ago to 29. Dilatation since.
94	R.W.V.P.	27	S.	2	3 yrs.	2 yrs.	Uneasy feeling along urethra. Nervous.	28	¾ 2½	24 24	30	Cured in 5 wks.	Dilatation.
95	B. M.	24	S.	1	3 yrs.	.....	Pain in urethra and testicles.	30	1 3	22 24	31	Cured in 4 wks.	Strong injection.
96	G. F.	27	S.	2	5 yrs.	2 yrs.	Pain and spasms while urinating; double meatus urethral chancre 3 mos. ago. Secondary syph., etc.	28	1	16	29	Str. cured in 4 wks.	Strong injection.
97	T. R.	29	S.	3	11 yrs.	2 yrs.	Shooting pains in urethra.	29	2½ 3¼	22	31	Cured in 2 mos.	Dilatation.
98	E. B. V.	36	S.	3	20 yrs.	2 yrs.	Chronic discharge, pains in urethra, chronic rheumatism, pains in testicles. Very much run down in health.	28	2 to 3 4 6½	23 22 22	31	Cured in 9 wks.	For past 15 years used dilatation by advice of well known Philadelphia specialist.
99	H. F. D.	24	S.	2	4 yrs.	2 yrs	Shooting pains in urethra.	33	3 4	24 24	34	Cured in 3 wks.	Dilatation.
100	T. Q. H.	26	S.	4	6 yrs.	1 yr.	Chronic discharge.	28	3 4	26 23	30	Cured in 10 wk. Too early s'xual indlgnce caus'd reappearance of slight discharge	Dilatation.

As the report shows, my figures as to the normal caliber of the urethra is about the same as given by most authors, the smallest caliber being 26 F., and the largest 39 F.

In summing up we find the normal caliber in the hundred cases reported as follows:

26 F in	1 Case	32 F in	10 Cases
27 F "	2 "	33 F "	2 "
28 F "	21 "	34 F "	3 "
29 F "	17 "	35 F "	2 "
30 F "	31 "	39 F "	1 "
31 F "	10 "		

And in order to effect a cure it will be observed that it was necessary to divide the strictures from one to three sizes French, or from one third millimeter to one millimeter larger than the normal caliber. This is very plainly demonstrated in those cases in which I had to operate a second, and in two cases a third, time before effecting a cure. The reason for this is plain when the causes and pathology of stricture are given due consideration.

The term "cured" is used in the sense that all traces of stricture have disappeared as well as all symptoms due to stricture. In some few cases a milky white discharge appeared later, for a short time, due in all cases, so far as I was able to learn, to too early sexual indulgence or intemperance.

In only one case of this report was there severe hemorrhage, and this was due to the division of a small artery in an abnormal location. I experienced the same trouble once previous due to same cause some years ago. However, by carefully applied pressure the hemorrhage was soon controlled. Ordinarily there is little or no hemorrhage. Undoubtedly the cocaine is valuable in preventing hemorrhage. In conclusion I desire to say that in making out this report I have only stated the main facts briefly, especially in giving the symptoms and former treatment. For to go into detail in the treatment followed out in those cases complicated with chronic posterior urethritis, cystitis, prostatorrhœa, etc, would consume too much space, and is not intended to include within the scope of this article. The main facts are given as correctly as I have been able to determine them by the methods I have adopted. My endeavors were to cure my patients in the way I considered the best, the quickest, and yet the safest manner without subjecting my patients to the torture of pain and other disagreeable features of other methods. The report not only shows the results of my efforts, but how well I have succeeded my patients can attest.